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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,787	07/31/2000	James Eric Wilson	11887RRUS01U	4860

7590 06/26/2003
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EXAMINER

NGUYEN, HUY D

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 06/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/629,787

Applicant(s)

WILSON ET AL.

Examiner

Huy D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5, 7, 9, 13-15, 17, 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Chawla et al.(U.S. Patent No. 6,496,700).

Regarding claims 1, 7, 9, 14-15, 17, 22-23, Chawla et al. disclose a method for determining cell/sector isolation values: base stations 5-15 transmit test signals at respective beacon frequencies to provide the reference signals for the RSS measurements taken by the wireless terminals 40. The beacon frequencies employed by the base station 5-15 are frequencies not used by other base stations in the vicinity. RSS measurement data is collected by wireless terminals 40 based on signals transmitted by the respective base stations 5-15. Such collected data can then be transmitted to at least one of the base stations 5-15 [see FIG. 3; Col. 6, lines 5-8; 24-31]. The RSS data can be transmitted by the wireless terminals 40 at times, for example, when the terminal is activated and registers with the base station, responds to a page, originates a call, and/or intermittently during a call or otherwise. Several current digital communication standards include provisions for wireless terminals to make such measurements, such as the

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mobile assisted hand-off (MAHO) and mobile assisted channel allocation (MACA) features of IS-136. [Col. 6, lines 11-19].

Regarding claims 5, 13, 21, disclose a method for repeating the previous steps for a plurality of cell/sectors in the cellular wireless communication system to produce a plurality of measured cell/sector pair radio frequency isolation values; and processing the plurality of measured cell/sector pair radio frequency isolation values to create an isolation matrix [Col. 6, lines 40-50].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4, 6, 8, 10-12, 16, 18-20, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chawla et al.(U.S. Patent No. 6,496,700).

Regarding claims 2-3, 10-11, 18-19, Chawla et al. discloses the claimed invention except for disabling the adjacent channels in the broadcast cell/sector or some of the neighboring cells/sectors. However, the preceding limitation is known in the art of communications to minimize adjacent channel interference. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to disable the adjacent channels in the broadcast cell/sector or some of the neighboring cells/sectors to help minimize adjacent channel interference.

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Regarding claims 4, 12, 20, Chawla et al. discloses the claimed invention except for normalizing the measured strength of the broadcast channel to produce a normalized broadcast channel signal strength. However, the normalization method is well known in the art to put a reference quantity in unity to ease the calculations. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to normalize the measured strength of the broadcast channel to produce a normalized broadcast channel signal strength for easier calculations.

Regarding claim 6, Chawla et al. discloses the claimed invention except that the broadcast channel is an unassigned traffic channel. It would have been an obvious matter of design choice to choose an unassigned traffic channel, since it appears that the invention would perform equally well with it.

Regarding claims 8, 16, 24, Chawla et al. discloses the claimed invention except that directing a plurality of mobile stations operating within the cellular wireless communication system to measure the strength of the broadcast channel and to measure the strength of respective serving traffic channels includes limiting such direction to mobile stations operating within a distance of the broadcast cell/sector. However, the preceding limitation is known in the art for minimizing the inaccuracy of measured data due to weak signal received from a long distance. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to limit the direction to mobile stations operating within a distance of the broadcast cell/sector to insure the measurement accuracy.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Tse (U.S. Patent No. 6,480,718) teaches automatic frequency planning for a wireless network.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 703-305-4778. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-6750.

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June 23, 2003

Erik Bost
PATENT EXAMINER